# 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS

AUG 2 9 2011

This summary of safety and effectiveness is provided as part of this Premarket Notification in compliance with 21 CFR, Part 807, Subpart E, Section 807.92.

# 1. Submitter's Information: 21 CFR 807.92(a)(1)

SAMSUNG MEDISON CO., LTD. 1003, Daechi-dong, Gangnam-gu, Seoul 135-280, Korea

#### Contact Person:

Kyeong-Mi, Park Regulatory Affairs Manager

Telephone:

82.2.2194.1373

Facsimile: 82.2

82.2.556.9209

Data Prepared: June 24, 2011

#### 2. Name of the device:

#### Common/Usual Name:

Diagnostic Ultrasound System and Accessories

Proprietary Name:

ACCUVIX A30 Diagnostic Ultrasound System

| Classification Names:                    | FR Number | Product Code |
|--|-----------|--------------|
| Ultrasonic Pulsed Doppler Imaging System | 892.1550  | ΓΥN          |
| Ultrasound Pulsed Echo Imaging System    | 892.1560  | IYO          |
| Diagnostic Ultrasound Transducer         | 892.1570  | ITX          |

## 3. Identification of the predicate or legally marketed device:

- ACCUVIX XG Diagnostic Ultrasound System (K103397)
- ACCUVIX V20 Diagnostic Ultrasound System (K092159)

## 4. Device Description:

The ACCUVIX A30 is a general purpose, mobile, software controlled, diagnostic ultrasound system. Its function is to acquire ultrasound data and to display the data as B mode, M mode, Color Doppler imaging, Power Doppler imaging, PW/CW Spectral Doppler mode, Harmonic imaging, Tissue Doppler imaging, 3D imaging mode (real time 4D imaging mode), Elastoscan Mode or as a combination of these modes. The ACCUVIX A30 also gives the operator the ability to measure anatomical structures and offers analysis packages that provide information that is used to make a diagnosis by competent health care professionals. The ACCUVIX A30 has real time acoustic output display with two basic indices, a mechanical index and a thermal index, which are both automatically displayed.

The ACCUVIX A30 has been designed to meet the following product safety standards:

- UL 60601-1, Safety requirements for Medical Equipment
- CSA C22.2 No. 601.1, Safety requirements for Medical Equipment
- IEC60601-2-37, Diagnostic Ultrasound Safety Standards
- EN/IEC60601-1, Safety requirements for Medical Equipment
- EN/IEC60601-1-2, EMC requirements for Medical Equipment
- NEMA UD-2, Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment
- NEMA UD-3, Standard for Real Time Display of Thermal and Mechanical Acoustic Output Indices on Diagnostic Ultrasound Equipment
- IEC 61157, Declaration of the acoustic output
- ISO10993-1, Biocompatibility

#### 5. Intended Uses:

The ACCUVIX A30 Diagnostic Ultrasound System and transducers are intended for diagnostic ultrasound imaging and fluid analysis of the human body.

The clinical applications include: Fetal, Abdominal, Pediatric, Small Organs, Neonatal Cephalic, Adult Cephalic, Trans-rectal, Trans-vaginal, Muscular-Skeletal (Conventional, Superficial), Cardiac Adult, Cardiac Pediatric, Peripheral vessel.

## 6. Technological Characteristics:

The ACCUVIX A30 is substantially equivalent with respect to safety, effectiveness, and functionality to the ACCUVIX XG Diagnostic Ultrasound System (K103397) and ACCUVIX V20 Diagnostic Ultrasound System (K092159).

All systems transmit ultrasonic energy into patients, then perform post processing of received echoes to generate on-screen display of anatomic structures and fluid flow within the body. All system allow for specialized measurements of structures and flow, and calculations.

#### END of 510(K) Summary



Food and Drug Administration 10903 New Hampshire Avenue Silver Spring, MD 20993

SAMSUNG Medison Co., Ltd. % Mr. Mark Job Responsible Third Party Official Regulatory Technology Services LLC 1394 25<sup>th</sup> Street NW BUFFALO MN 55313

AUG 2 9 2011

Re: K112339

Trade/Device Name: ACCUVIX A30 Diagnostic Ultrasound System

Regulation Number: 21 CFR 892.1550

Regulation Name: Ultrasonic pulsed doppler imaging system

Regulatory Class: II

Product Code: IYN, IYO, and ITX

Dated: August 12, 2011 Received: August 15, 2011

#### Dear Mr. Job:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the ACCUVIX A30 Diagnostic Ultrasound System, as described in your premarket notification:

# Transducer Model Number

| <u>C1-4</u>   | <u>L5-13IS</u> | <u>CW-2.0</u> |
|---------------|----------------|---------------|
| <u>C2-61C</u> | <u>L7-16IS</u> | <u>CW4-0</u>  |
| C5-8          | P2-4BA         | <u>CW6-0</u>  |
| EC4-9IS       | <u>V2-6</u>    | ·             |
| <u>L4-7</u>   | <u>V5-9</u>    |               |

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

If you have any questions regarding the content of this letter, please contact Lauren Hefner at (301) 796-6881.

Sincerely Yours,

Mary S. Pastel, Sc.D.

Director

Division of Radiological Devices Office of In Vitro Diagnostic Device

Evaluation and Safety

Center for Devices and Radiological Health

Enclosure(s)

# SECTION 1.3 INDICATIONS FOR USE

| IN IN                               |  | INDICATIONS FOR USE                     | •   |
|-------------------------------------|--|---|---|
| 510(k) Number                       | (if known):  |   |   |
| Device Name:                        | ACCUVIX A30 Diagnost   | tic Ultrasound System                   |   |
| Indications for U                   | Jse:   |   |   |
| imaging and flu<br>The clinical app | id analysis of the human be<br>lications include: Fetal, Ab<br>ans-vaginal, Muscular-Ske | ody.<br>odominal, Pediatric, Small Orga | ntended for diagnostic ultrasound<br>an, Neonatal Cephalic, Adult Cephalic,<br>), Cardiac Adult, Cardiac Pediatric, |
|                                     |  |   |   |
|                                     |  |   |   |
|                                     |  |   |   |
|                                     |  |   |   |
|                                     |  |   |   |
|                                     |  |   |   |
|                                     |  |   |   |
|                                     |  |   |   |
| Prescriptio<br>(Part 21 Ci          | on Use<br>FR 801 Subpart D)  | AND/OR                                  | Over-The-Counter Use(21 CFR 801 Subpart C)  |
| (PLEA                               | SE DO NOT WRITE BELO   | W THIS LINE-CONTINUE ON A               | NOTHER PAGE OF NEEDED)  |
|                                     |  |   | •   |

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

(Division Sign-Off)
Division of Radiological Devices
Office of In Vitro Diagnostic Device Evaluation and Safety

V117 229

510(k) No.:

Device Name: ACCUVIX A30 Diagnostic Ultrasound System

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                           | Clinical Application         |   |   |     | Mode of C | peration (*inc    | ludes simultaneo     | us B-mode)                            |
|---------------------------|------------------------------|---|---|-----|-----------|-------------------|----------------------|---------------------------------------|
| General<br>(Track I only) | Specific<br>(Tracks I & III) | В | М | PWD | CWD       | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.)                      |
| Ophthalmic                | Ophthalmic                   |   |   |     |           |                   |                      | · · · · · · · · · · · · · · · · · · · |
|                           | Fetal (See Note 3)           | N | N | N   |           | N                 | Note I               | Notes 2, 7, 8                         |
|                           | Abdominal                    | N | N | N   | N         | N                 | Note 1               | Notes 2, 4, 7, 8                      |
|                           | Intra-operative (See Note 6) |   |   |     |           |                   |                      |                                       |
|                           | Intra-operative (Neuro.)     |   |   |     |           |                   |                      |                                       |
| Fetal Imaging             | Laparoscopic                 | 1 |   |     |           |                   |                      |                                       |
| & Other                   | Pediatric                    | N | N | N   |           | N                 | Note 1               | Note 2, 5, 6, 7, 8, 9                 |
|                           | Small Organ (See Note 5)     | N | N | N   |           | N                 | Note I               | Note 2, 5, 6, 7, 8, 9, 10             |
|                           | Neonatal Cephalic            | N | N | N   |           | N                 | Note I               | Note 2, 7, 8                          |
|                           | Adult Cephalic               | N | N | N   | N         | N                 | Note 1               | Note 4, 7                             |
|                           | Trans-rectal                 | N | N | N   |           | N                 | Note 1               | Note 2, 7, 8, 10                      |
|                           | Trans-vaginal                | N | N | N   |           | N                 | Note 1               | Note 2, 7, 8, 10                      |
|                           | Trans-urethral               |   |   |     |           |                   |                      |                                       |
|                           | Trans-esoph. (non-Cardiac)   |   |   |     |           |                   |                      |                                       |
|                           | Musculo-skel. (Convent.)     | N | N | N   |           | N                 | Note 1               | Note 2, 5, 6, 7, 9                    |
|                           | Musculo-skel. (Superfic.)    | N | Ŋ | N   |           | N                 | Note 1               | Note 2, 5, 6, 7, 9                    |
|                           | Intra-luminal                |   |   |     |           |                   |                      | ·····                                 |
|                           | Other (spec.)                | 1 |   |     |           |                   |                      |                                       |
|                           | Cardiac Adult                | N | N | N   | N         | N                 | Note 1               | Note 4, 7                             |
| Cardiac                   | Cardiac Pediatric            | Ŋ | N | N   | N         | N                 | Note I               | Note 4, 7                             |
|                           | Trans-esophageal (Cardiac)   |   |   |     |           |                   |                      | •                                     |
|                           | Other (spec.)                |   |   |     |           |                   |                      |                                       |
| Peripheral                | Peripheral vessel            | N | N | N   | N         | N                 | Note 1               | Note 2, 5, 6, 7, 8, 9                 |
| Vessel                    | Other (spec.)                |   |   | •   |           |                   |                      |                                       |

N= new indication; P= previously cleared by FDA; E= added under Appendix E

#### **Additional Comments:**

Color Doppler includes Power (Amplitude) Doppler

Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)
Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

510K K112339

510(k) No.:

Device Name: C1-4 for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                           | Clinical Application         |   |   |     |     |                   | des simultaneous B   |                                       |
|---------------------------|------------------------------|---|---|-----|-----|-------------------|----------------------|---------------------------------------|
| General<br>(Track I only) | Specific<br>(Tracks I & III) | В | М | PWD | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.)                      |
| Ophthalmic                | Ophthalmic                   |   |   |     |     |                   |                      |                                       |
|                           | Fetal (See Note 3)           | N | Ν | N   |     | N                 | Note 1               | Notes 2, 7, 8                         |
|                           | Abdominal                    | N | N | N   |     | N                 | Note 1               | Notes 2, 7, 8                         |
|                           | Intra-operative (See Note 6) |   |   |     |     |                   |                      |                                       |
|                           | Intra-operative (Neuro.)     |   |   |     |     |                   |                      |                                       |
| Fetal Imaging             | Laparoscopic                 |   |   |     |     |                   |                      |                                       |
| & Other                   | Pediatric                    | N | N | N   |     | N                 | Note 1               | Notes 2, 7, 8                         |
|                           | Small Organ (See Note 5)     |   |   |     |     |                   |                      |                                       |
|                           | Neonatal Cephalic            |   |   |     |     |                   |                      |                                       |
|                           | Adult Cephalic               |   |   |     |     |                   |                      | · · · · · · · · · · · · · · · · · · · |
|                           | Trans-rectal                 | 1 |   |     |     |                   |                      |                                       |
|                           | Trans-vaginal                |   | • |     |     |                   |                      |                                       |
|                           | Trans-urethral               |   |   |     | -   |                   |                      |                                       |
|                           | Trans-esoph. (non-Cardiac)   |   |   |     |     |                   |                      |                                       |
|                           | Musculo-skel. (Convent.)     |   |   |     |     |                   |                      |                                       |
|                           | Musculo-skel. (Superfic.)    |   |   |     | -   |                   |                      |                                       |
|                           | Intra-luminal                |   |   |     |     |                   |                      |                                       |
|                           | Other (spec.)                |   |   |     |     |                   |                      |                                       |
|                           | Cardiac Adult                |   |   |     |     |                   |                      |                                       |
| Cardiac                   | Cardiac Pediatric            |   |   |     |     |                   |                      |                                       |
|                           | Trans-esophageal (Cardiac)   |   |   |     |     |                   |                      |                                       |
|                           | Other (spec.)                |   |   |     |     |                   |                      |                                       |
| Peripheral                | Peripheral vessel            |   |   |     |     |                   |                      |                                       |
| Vessel                    | Other (spec.)                |   |   |     | i   |                   |                      |                                       |

N= new indication; P= previously cleared by FDA; E= added under Appendix E

#### Additional Comments:

Color Doppler includes Power (Amplitude) Doppler
Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD) Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Radiological Devices Office of In Vitro Diagnostic Device Evaluation and Safety

Indications for Use

510(k) No.:

Device Name: C2-6IC for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                           | Clinical Application         |   | Mode of Operation (*includes simultaneous B-mode) |     |     |                   |                      |                  |  |  |  |
|---------------------------|------------------------------|---|---|-----|-----|-------------------|----------------------|------------------|--|--|--|
| General<br>(Track I only) | Specific<br>(Tracks I & III) | В | М   | PWD | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.) |  |  |  |
| Ophthalmic                | Ophthalmic                   |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Fetal (See Note 3)           | P | P   | P   |     | P                 | Note 1               | Notes 2, 7, 8    |  |  |  |
|                           | Abdominal                    | Р | P   | P   |     | Р                 | Note I               | Notes 2, 7, 8    |  |  |  |
|                           | Intra-operative (See Note 6) |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Intra-operative (Neuro.)     |   |   |     | -   |                   |                      |                  |  |  |  |
| Fetal Imaging             | Laparoscopic                 |   |   |     |     |                   |                      |                  |  |  |  |
| & Other                   | Pediatric                    | Р | P   | Р   |     | P                 | Note I               | Notes 2, 7, 8    |  |  |  |
|                           | Small Organ (See Note 5)     |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Neonatal Cephalic            |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Adult Cephalic               | 1 |   |     |     |                   |                      |                  |  |  |  |
|                           | Trans-rectal                 |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Trans-vaginal                |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Trans-urethral               |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Trans-esoph. (non-Cardiac)   |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Musculo-skel. (Convent.)     |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Musculo-skel. (Superfic.)    |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Intra-luminal                | _ |   |     |     |                   |                      |                  |  |  |  |
|                           | Other (spec.)                |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Cardiac Adult                | 1 |   |     |     |                   |                      |                  |  |  |  |
| Cardiac                   | Cardiac Pediatric            |   |   |     |     |                   |                      |                  |  |  |  |
|                           | Trans-esophageal (Cardiac)   |   |   |     |     | -                 |                      |                  |  |  |  |
|                           | Other (spec.)                |   |   |     |     |                   |                      |                  |  |  |  |
| Peripheral                | Peripheral vessel            |   |   |     |     |                   |                      |                  |  |  |  |
| Vessel                    | Other (spec.)                | 1 |   |     |     | - "               |                      |                  |  |  |  |

N= new indication; P= previously cleared by FDA K103397; E= added under Appendix E

# Additional Comments:

Color Doppler includes Power (Amplitude) Doppler

Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)
Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off) Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

510K 4112339

510(k) No.:

Device Name: C5-8 for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                           | Clinical Application         |    | Mode of Operation (*includes simultaneous B-mode) |     |     |                   |                      |                  |  |  |  |
|---------------------------|------------------------------|----|---|-----|-----|-------------------|----------------------|------------------|--|--|--|
| General<br>(Track I only) | Specific<br>(Tracks I & III) | В  | М   | PWD | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.) |  |  |  |
| Ophthalmic                | Ophthalmic                   |    |   |     |     |                   |                      |                  |  |  |  |
|                           | Fetal (See Note 3)           | N  | N   | N   |     | N                 | Note 1               | Notes 2, 7, 8    |  |  |  |
|                           | Abdominal                    | N  | N   | N   |     | N                 | Note I               | Notes 2, 7, 8    |  |  |  |
|                           | Intra-operative (See Note 6) |    |   |     |     | • "               |                      |                  |  |  |  |
|                           | Intra-operative (Neuro.)     |    |   |     |     |                   |                      |                  |  |  |  |
| Fetal Imaging             | Laparoscopic                 |    |   |     |     |                   |                      |                  |  |  |  |
| & Other                   | Pediatric                    | N  | N   | N   |     | N                 | Note !               | Notes 2, 7, 8    |  |  |  |
|                           | Small Organ (See Note 5)     | N  | N   | N   |     | N                 | Note 1               | Notes 2, 7, 8    |  |  |  |
|                           | Neonatal Cephalic            | N  | N   | N   |     | N                 | Note 1               | Notes 2, 7, 8    |  |  |  |
|                           | Adult Cephalic               |    | _   |     |     |                   |                      | · · · <u>-</u>   |  |  |  |
|                           | Trans-rectal                 |    |   |     |     |                   |                      |                  |  |  |  |
|                           | Trans-vaginal                |    |   |     |     |                   |                      | ···-             |  |  |  |
|                           | Trans-urethral               |    |   |     | ,   | ·                 |                      |                  |  |  |  |
|                           | Trans-esoph. (non-Cardiac)   | 1  |   |     |     |                   |                      |                  |  |  |  |
|                           | Musculo-skel. (Convent.)     | 1  |   |     |     |                   |                      |                  |  |  |  |
|                           | Musculo-skel. (Superfic.)    |    |   |     |     | <del></del>       |                      |                  |  |  |  |
|                           | Intra-luminal                | 1  |   |     |     |                   |                      |                  |  |  |  |
|                           | Other (spec.)                | 17 |   |     |     |                   |                      |                  |  |  |  |
|                           | Cardiac Adult                | 1  |   |     |     |                   |                      |                  |  |  |  |
| Cardiac                   | Cardiac Pediatric            |    |   |     |     |                   |                      |                  |  |  |  |
|                           | Trans-esophageal (Cardiac)   |    |   |     |     |                   |                      |                  |  |  |  |
|                           | Other (spec.)                |    |   |     |     |                   |                      | <del></del>      |  |  |  |
| Peripheral                | Peripheral vessel            | N  | N   | N   |     | N                 | Note I               | Notes 2, 7, 8    |  |  |  |
| Vessel                    | Other (spec.)                |    |   |     |     |                   |                      |                  |  |  |  |

N= new indication; P= previously cleared by FDA; E= added under Appendix E

## **Additional Comments:**

Color Doppler includes Power (Amplitude) Doppler

Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD) Prescription Use (Per 21 CFR 801.109)

Indications for Use

(Division Sign-Off) Division of Radiological Devices Office of In Vitro Diagnostic Device Evaluation and Safety

Section 1.3, page 5

510(k) No.:

Device Name: EC4-9IS for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                          | Clinical Application         | Ť |   |     | Mode of O | peration (*inclu  | ides simultaneous l  | B-mode)          |
|--------------------------|------------------------------|---|---|-----|-----------|-------------------|----------------------|------------------|
| General<br>(Track Lonly) | Specific<br>(Tracks I & III) | В | М | PWD | CWD       | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.) |
| Ophthalmic               | Ophthalmic                   |   |   |     |           |                   |                      |                  |
|                          | Fetal (See Note 3)           |   |   |     |           |                   |                      |                  |
|                          | Abdominal                    |   |   |     |           |                   |                      |                  |
|                          | Intra-operative (See Note 6) |   |   |     |           |                   |                      |                  |
|                          | Intra-operative (Neuro.)     |   |   |     | -         |                   |                      |                  |
| Fetal Imaging            | Laparoscopic                 |   |   |     |           |                   |                      |                  |
| & Other                  | Pediatric                    |   |   |     |           |                   |                      |                  |
| ,                        | Small Organ (See Note 5)     |   |   |     |           |                   |                      | - "              |
|                          | Neonatal Cephalic            |   |   |     |           |                   |                      | . =              |
|                          | Adult Cephalic               |   |   |     |           |                   |                      |                  |
|                          | Trans-rectal                 | Р | P | Р   |           | Р                 | Note I               | Note 2, 7, 8, 10 |
|                          | Trans-vaginal                | P | P | P   |           | P                 | Note !               | Note 2, 7, 8, 10 |
|                          | Trans-urethral               |   |   |     |           |                   |                      |                  |
|                          | Trans-esoph. (non-Cardiac)   |   |   |     |           |                   |                      |                  |
|                          | Musculo-skel. (Convent.)     |   |   |     |           |                   |                      |                  |
|                          | Musculo-skel. (Superfic.)    |   |   |     |           |                   |                      |                  |
|                          | Intra-luminal                |   |   |     |           |                   |                      |                  |
|                          | Other (spec.)                |   |   |     |           |                   |                      |                  |
|                          | Cardiac Adult                | 1 |   |     |           |                   |                      |                  |
| Cardiac                  | Cardiac Pediatric            |   |   |     |           |                   |                      |                  |
|                          | Trans-esophageal (Cardiac)   |   |   |     |           |                   |                      |                  |
|                          | Other (spec.)                |   |   |     |           |                   | -                    |                  |
| Peripheral               | Peripheral vessel            |   |   |     |           |                   | -                    |                  |
| Vessel                   | Other (spec.)                |   |   |     | İ         |                   |                      |                  |

N= new indication; P= previously cleared by FDA K092159; E= added under Appendix E

## Additional Comments:

Color Doppler includes Power (Amplitude) Doppler
Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD) Prescription Use (Per 21 CFR 801.109)

> (Division Sign-Of Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

510(k) No.:

Device Name: L4-7 for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                           | Clinical Application         | Ť |   |     |     | peration (*inclu  | des simultaneous E   | 3-mode)            |
|---------------------------|------------------------------|---|---|-----|-----|-------------------|----------------------|--------------------|
| General<br>(Track I only) | Specific<br>(Tracks I & III) | В | М | PWD | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.)   |
| Ophthalmic                | Ophthalmic                   |   |   |     |     |                   |                      |                    |
|                           | Fetal (See Note 3)           |   |   |     | _   |                   |                      |                    |
|                           | Abdominal                    |   |   |     |     |                   |                      |                    |
|                           | Intra-operative (See Note 6) |   |   |     | ·   |                   |                      |                    |
|                           | Intra-operative (Neuro.)     |   |   |     |     |                   |                      |                    |
| Fetal Imaging             | Laparoscopic                 |   |   |     |     |                   |                      |                    |
| & Other                   | Pediatric                    | N | N | N   |     | N                 | Note 1               | Note 2, 5, 6, 7, 9 |
|                           | Small Organ (See Note 5)     | N | N | N   |     | N                 | Note I               | Note 2, 5, 6, 7, 9 |
|                           | Neonatal Cephalic            |   |   |     |     |                   |                      |                    |
|                           | Adult Cephalic               |   |   |     |     |                   |                      | ·                  |
|                           | Trans-rectal                 |   |   |     |     |                   |                      |                    |
|                           | Trans-vaginal                |   |   |     |     |                   |                      |                    |
|                           | Trans-urethral               |   |   |     |     |                   |                      | -                  |
|                           | Trans-esoph. (non-Cardiac)   |   |   |     |     |                   |                      |                    |
|                           | Musculo-skel. (Convent.)     | N | N | N   |     | N                 | Note I               | Note 2, 5, 6, 7, 9 |
|                           | Musculo-skel. (Superfic.)    | N | N | N   |     | N                 | Note I               | Note 2, 5, 6, 7, 9 |
|                           | Intra-luminal                |   |   |     |     |                   |                      | •                  |
|                           | Other (spec.)                |   |   |     |     |                   |                      |                    |
|                           | Cardiac Adult                |   |   | Ì   |     |                   |                      |                    |
| Cardiac                   | Cardiac Pediatric            |   |   |     |     |                   |                      |                    |
|                           | Trans-esophageal (Cardiac)   |   |   |     |     |                   |                      |                    |
|                           | Other (spec.)                |   |   |     |     |                   |                      | ·                  |
| Peripheral                | Peripheral vessel            | N | N | N   |     | N                 | Note I               | Note 2, 5, 6, 7, 9 |
| Vessel                    | Other (spec.)                |   |   |     |     |                   |                      |                    |

N= new indication; P= previously cleared by FDA; E= added under Appendix E

#### Additional Comments:

Color Doppler includes Power (Amplitude) Doppler

Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)
Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)
Division of Radiological Devices
Office of In Vttro Diagnostic Device Evaluation and Safety

510K K112339

510(k) No.:

Device Name: L5-13IS for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                           | Clinical Application         |   | Mode of Operation (*includes simultaneous B-mode) |     |     |                   |                      |                        |  |  |  |
|---------------------------|------------------------------|---|---|-----|-----|-------------------|----------------------|------------------------|--|--|--|
| General<br>(Track I only) | Specific<br>(Tracks I & III) | В | М   | PWD | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.)       |  |  |  |
| Ophthalmic                | Ophthalmic                   |   | ĺ   |     |     |                   |                      |                        |  |  |  |
|                           | Fetal (See Note 3)           |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Abdominal                    |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Intra-operative (See Note 6) |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Intra-operative (Neuro.)     |   |   |     |     |                   |                      |                        |  |  |  |
| Fetal Imaging             | Laparoscopic                 |   |   |     |     |                   |                      |                        |  |  |  |
| & Other                   | Pediatric                    | P | P   | Р   |     | P                 | Note I               | Note 2, 5, 6, 7, 9     |  |  |  |
|                           | Small Organ (See Note 5)     | P | P   | Р   |     | P                 | Note I               | Note 2, 5, 6, 7, 9, 10 |  |  |  |
|                           | Neonatal Cephalic            |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Adult Cephalic               |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Trans-rectal                 |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Trans-vaginal                |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Trans-urethral               |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Trans-esoph. (non-Cardiac)   |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Musculo-skel. (Convent.)     | Р | P   | P   |     | P                 | Note I               | Note 2, 5, 6, 7, 9     |  |  |  |
|                           | Musculo-skel. (Superfic.)    | Р | Р   | P   | -   | P                 | Note 1               | Note 2, 5, 6, 7, 9     |  |  |  |
|                           | Intra-luminal                |   |   |     | i   |                   |                      |                        |  |  |  |
|                           | Other (spec.)                |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Cardiac Adult                |   |   |     |     |                   |                      |                        |  |  |  |
| Cardiac                   | Cardiac Pediatric            |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Trans-esophageal (Cardiac)   |   |   |     |     |                   |                      |                        |  |  |  |
|                           | Other (spec.)                |   |   |     |     |                   |                      |                        |  |  |  |
| Peripheral                | Peripheral vessel            | Р | Р   | P   |     | Р                 | Note 1               | Note 2, 5, 6, 7, 9     |  |  |  |
| Vessel                    | Other (spec.)                |   |   | i   |     |                   |                      |                        |  |  |  |

N= new indication; P= previously cleared by FDA K103397; E= added under Appendix E

## **Additional Comments:**

Color Doppler includes Power (Amplitude) Doppler
Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD) Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Radiological Devices Office of In Vitro Diagnostic Device Evaluation and Safety

510(k) No.:

Device Name: L7-16IS for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                | Clinical Application         |   |   |     | Mode of O                               | peration (*inclu | des simultaneous I | 3-mode)                                 |
|----------------|------------------------------|---|---|-----|---|------------------|--------------------|---|
| General        | Specific                     | В | М | PWD | CWD                                     | Color            | Combined*          | Other                                   |
| (Track I only) | (Tracks I & III)             | _ |   |     |   | Doppler*         | (Spec.)            | (Spec.)                                 |
| Ophthalmic     | Ophthalmic                   |   |   | •   |   |                  |                    |   |
| -              | Fetal (See Note 3)           |   |   |     |   |                  |                    |   |
|                | Abdominal                    |   |   |     |   |                  |                    |   |
|                | Intra-operative (See Note 6) |   |   |     |   |                  |                    |   |
| <u>.</u>       | Intra-operative (Neuro.)     |   |   |     |   |                  |                    |   |
| Fetal Imaging  | Laparoscopie                 |   |   |     |   |                  |                    |   |
| & Other        | Pediatric                    | P | P | P   |   | P                | Note 1             | Note 2, 5, 6, 7, 9                      |
|                | Small Organ (See Note 5)     | Р | P | P   |   | P                | Note 1             | Note 2, 5, 6, 7, 9                      |
|                | Neonatal Cephalic            |   |   |     |   |                  |                    | <del>-</del>                            |
|                | Adult Cephalic               |   |   |     |   |                  |                    |   |
|                | Trans-rectal                 |   |   |     |   |                  |                    |   |
|                | Trans-vaginal                |   |   |     |   |                  |                    |   |
|                | Trans-urethral               |   |   |     | -                                       |                  |                    |   |
|                | Trans-esoph. (non-Cardiac)   |   |   |     |   |                  |                    |   |
|                | Musculo-skel. (Convent.)     | Р | P | Р   |   | P                | Note 1             | Note 2, 5, 6, 7, 9                      |
|                | Musculo-skel. (Superfic.)    | P | P | Р   | •                                       | Р                | Note 1             | Note 2, 5, 6, 7, 9                      |
|                | Intra-luminal                |   |   |     |   |                  |                    |   |
|                | Other (spec.)                |   |   |     |   |                  |                    |   |
|                | Cardiac Adult                |   |   |     |   |                  |                    |   |
| Cardiac        | Cardiac Pediatric            |   |   |     | *************************************** |                  | 1                  |   |
|                | Trans-esophageal (Cardiac)   |   |   |     |   |                  |                    |   |
|                | Other (spec.)                |   |   |     |   |                  |                    | , |
| Peripheral     | Peripheral vessel            | Р | Р | Р   |   | Р                | Note 1             | Note 2, 5, 6, 7, 9                      |
| Vessel         | Other (spec.)                | 1 |   |     |   |                  |                    | <u> </u>                                |

N= new indication; P= previously cleared by FDA K092159; E= added under Appendix E

#### Additional Comments:

Color Doppler includes Power (Amplitude) Doppler

Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

Prescription Use (Per 21 CFR 801.109)

1 10 7

(Division Sign-Off)
Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

510K K112339

510(k) No.:

Device Name: P2-4BA for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

| ·-                        | Clinical Application         |   |   |     | Mode of O | peration (*inclu  | des simultaneous B-1 | node)            |
|---------------------------|------------------------------|---|---|-----|-----------|-------------------|----------------------|------------------|
| General<br>(Track I only) | Specific<br>(Tracks I & III) | В | M | PWD | CWD       | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.) |
| Ophthalmic                | Ophthalmic                   |   |   |     |           |                   |                      |                  |
|                           | Fetal (See Note 3)           |   |   |     |           |                   |                      |                  |
|                           | Abdominal                    | P | P | P   | P         | Р                 | Note 1               | Note 4, 7        |
|                           | Intra-operative (See Note 6) |   |   |     |           |                   |                      |                  |
|                           | Intra-operative (Neuro.)     |   |   |     |           |                   |                      | <del>-</del>     |
| Fetal Imaging             | Laparoscopic                 | 1 |   |     |           |                   |                      |                  |
| & Other                   | Pediatric                    |   |   |     |           |                   |                      |                  |
|                           | Small Organ (See Note 5)     |   | - |     |           |                   |                      |                  |
|                           | Neonatal Cephalic            |   |   |     |           |                   |                      | _                |
|                           | Adult Cephalic               | P | Р | Р   | Р         | P                 | Note I               | Note 4, 7        |
|                           | Trans-rectal                 |   |   |     |           |                   |                      |                  |
|                           | Trans-vaginal                | 1 |   |     |           |                   |                      |                  |
|                           | Trans-urethral               |   |   |     |           |                   |                      | ,                |
|                           | Trans-esoph. (non-Cardiac)   |   |   |     |           |                   |                      | <del></del>      |
|                           | Musculo-skel. (Convent.)     |   |   |     |           |                   |                      |                  |
|                           | Musculo-skel. (Superfic.)    | 1 |   |     |           |                   |                      | <del> </del>     |
|                           | Intra-luminal                | 1 |   |     |           |                   |                      |                  |
|                           | Other (spec.)                |   |   |     |           |                   |                      |                  |
|                           | Cardiac Adult                | Р | P | Р   | Р         | P                 | Note I               | Note 4, 7        |
| Cardiac                   | Cardiac Pediatric            | Р | Р | Р   | Р         | Р                 | Note 1               | Note 4, 7        |
|                           | Trans-esophageal (Cardiac)   |   |   |     |           |                   |                      | -                |
|                           | Other (spec.)                |   |   |     |           |                   |                      |                  |
| Peripheral                | Peripheral vessel            |   |   |     |           |                   |                      |                  |
| Vessel                    | Other (spec.)                |   |   |     |           |                   |                      |                  |

N= new indication; P= previously cleared by FDA K103397; E= added under Appendix E

#### Additional Comments:

Color Doppler includes Power (Amplitude) Doppler

Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)
Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Radiological Devices
Office of In Vitro Diagnostic Device Evaluation and Safety

510K K112339

Indications for Use

Section 1.3, page 10

510(k) No.:

Device Name: V2-6 for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                           | Mode of Operation (*includes simultaneous B-mode) |                |   |     |     |                   |                      |               |  |
|---------------------------|---|----------------|---|-----|-----|-------------------|----------------------|---------------|--|
| General<br>(Track I only) | Specific<br>(Tracks I & III)                      | В              | М | PWD | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other (Spec.) |  |
| Ophthalmic                | Ophthalmic  |                |   | i   |     | ·                 |                      |               |  |
|                           | Fetal (See Note 3)                                | Р              | P | Р   | -   | P                 | Note 1               | Note 2, 7, 8  |  |
|                           | Abdominal   | Р              | Р | Р   |     | Р                 | Note I               | Note 2, 7, 8  |  |
|                           | Intra-operative (See Note 6)                      |                |   |     |     |                   |                      |               |  |
|                           | Intra-operative (Neuro.)                          |                |   |     |     |                   |                      | <del></del>   |  |
| Fetal Imaging             | Laparoscopic                                      | $\neg$         |   |     |     |                   |                      |               |  |
| & Other                   | Pediatric   | Р              | P | Р   |     | P                 | Note 1               | Note 2, 7, 8  |  |
|                           | Small Organ (See Note 5)                          | 1              |   |     |     | "                 |                      |               |  |
|                           | Neonatal Cephalic                                 |                |   |     |     |                   |                      |               |  |
|                           | Adult Cephalic                                    |                |   |     |     |                   |                      |               |  |
|                           | Trans-rectal                                      | 1              |   | i i |     |                   |                      |               |  |
|                           | Trans-vaginal                                     | 1              |   |     |     |                   |                      |               |  |
|                           | Trans-urethral                                    |                |   |     |     |                   |                      |               |  |
|                           | Trans-esoph. (non-Cardiac)                        |                |   |     |     |                   |                      |               |  |
|                           | Musculo-skel. (Convent.)                          |                |   |     |     |                   |                      | -             |  |
|                           | Musculo-skel. (Superfic.)                         | 1              |   | i   | -   | -                 |                      |               |  |
|                           | Intra-luminal                                     | 1              |   |     | i   |                   |                      |               |  |
|                           | Other (spec.)                                     |                |   |     |     | -                 |                      |               |  |
|                           | Cardiac Adult                                     | 7              |   |     |     |                   |                      |               |  |
| Cardiac                   | Cardiac Pediatric                                 |                |   |     |     |                   |                      |               |  |
|                           | Trans-esophageal (Cardiac)                        |                |   |     |     | <u> </u>          |                      |               |  |
|                           | Other (spec.)                                     |                |   |     |     |                   |                      |               |  |
| Peripheral                | Peripheral vessel                                 | $\blacksquare$ |   |     |     |                   |                      |               |  |
| Vessel                    | Other (spec.)                                     |                |   |     |     |                   |                      |               |  |

N= new indication; P= previously cleared by FDA K092159; E= added under Appendix E

#### Additional Comments:

Color Doppler includes Power (Amplitude) Doppler

- Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD
- Note 2: Includes imaging for guidance of biopsy
- Note 3: Includes infertility monitoring of follicle development
- Note 4: Color M-mode
- Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients
- Note 6: Abdominal organs and peripheral vessel
- Note 7: Tissue Harmonic Imaging (THI)
- Note 8: 3D imaging
- Note 9: Panoramic imaging
- Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)
Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

510K h112339

510(k) No.:

Device Name: V5-9 for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

| Clinical Application      |                              |   | Mode of Operation (*includes simultaneous B-mode) |     |     |                   |                      |                                       |  |  |  |
|---------------------------|------------------------------|---|---|-----|-----|-------------------|----------------------|---------------------------------------|--|--|--|
| General<br>(Track I only) | Specific<br>(Tracks I & III) | В | M   | PWD | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.)                      |  |  |  |
| Ophthalmic                | Ophthalmic                   |   |   |     | i   | -                 |                      | <del></del>                           |  |  |  |
|                           | Fetal (See Note 3)           |   |   |     |     |                   |                      |                                       |  |  |  |
|                           | Abdominal                    |   |   |     |     |                   |                      |                                       |  |  |  |
|                           | Intra-operative (See Note 6) |   |   |     |     |                   |                      | <del>.</del>                          |  |  |  |
|                           | Intra-operative (Neuro.)     |   |   |     |     |                   |                      |                                       |  |  |  |
| Fetal Imaging             | Laparoscopic                 |   |   |     |     |                   |                      |                                       |  |  |  |
| & Other                   | Pediatric                    |   |   |     |     |                   |                      |                                       |  |  |  |
|                           | Small Organ (See Note 5)     | 1 |   |     |     |                   |                      |                                       |  |  |  |
|                           | Neonatal Cephalic            |   | -   |     |     |                   |                      |                                       |  |  |  |
|                           | Adult Cephalic               |   |   |     |     |                   |                      |                                       |  |  |  |
|                           | Trans-rectal                 | P | P   | P   |     | P                 | Note 1               | Note 2, 7, 8                          |  |  |  |
|                           | Trans-vaginal                | P | Р   | Р   |     | P                 | Note I               | Note 2, 7, 8                          |  |  |  |
|                           | Trans-urethral               |   |   |     |     |                   |                      |                                       |  |  |  |
|                           | Trans-esoph. (non-Cardiac)   |   |   |     |     |                   |                      |                                       |  |  |  |
|                           | Musculo-skel. (Convent.)     |   |   |     |     |                   |                      |                                       |  |  |  |
|                           | Musculo-skel. (Superfic.)    |   |   | Ì   |     |                   |                      | -                                     |  |  |  |
|                           | Intra-luminal                |   |   |     |     |                   |                      |                                       |  |  |  |
|                           | Other (spec.)                |   |   |     | İ   |                   |                      | -                                     |  |  |  |
|                           | Cardiac Adult                | 1 |   |     |     |                   |                      | · · · · · · · · · · · · · · · · · · · |  |  |  |
| Cardiac                   | Cardiac Pediatric            |   |   |     |     | -                 |                      | -                                     |  |  |  |
|                           | Trans-esophageal (Cardiac)   | 1 |   |     | ·   |                   |                      |                                       |  |  |  |
|                           | Other (spec.)                |   |   | _   |     |                   |                      | ·                                     |  |  |  |
| Peripheral                | Peripheral vessel            |   |   |     |     |                   |                      |                                       |  |  |  |
| Vessel                    | Other (spec.)                |   |   |     |     |                   |                      |                                       |  |  |  |

N= new indication; P= previously cleared by FDA K103397; E= added under Appendix E

#### **Additional Comments:**

Color Doppler includes Power (Amplitude) Doppler
Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD) Prescription Use (Per 21 CFR 801.109)

> (Division Sign-Off) Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

510(k) No.:

Device Name: CW2.0 for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

| Clinical Application      |                              |   | Mode of Operation (*includes simultaneous B-mode) |          |     |                   |                      |                  |  |  |  |
|---------------------------|------------------------------|---|---|----------|-----|-------------------|----------------------|------------------|--|--|--|
| General<br>(Track I only) | Specific<br>(Tracks I & III) | В | М   | PWD      | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.) |  |  |  |
| Ophthalmic                | Ophthalmic                   |   |   |          |     |                   |                      |                  |  |  |  |
|                           | Fetal (See Note 3)           |   |   |          |     |                   |                      | <u>-</u>         |  |  |  |
|                           | Abdominal                    |   |   | <u> </u> |     |                   |                      |                  |  |  |  |
|                           | Intra-operative (See Note 6) |   |   |          |     |                   |                      |                  |  |  |  |
|                           | Intra-operative (Neuro.)     |   |   |          |     |                   |                      |                  |  |  |  |
| Fetal Imaging             | Laparoscopic                 |   |   |          |     |                   |                      |                  |  |  |  |
| & Other                   | Pediatric                    |   |   |          |     |                   |                      | ,                |  |  |  |
|                           | Small Organ (See Note 5)     |   |   |          |     |                   |                      |                  |  |  |  |
|                           | Neonatal Cephalic            |   |   |          |     |                   |                      | •••              |  |  |  |
|                           | Adult Cephalic               |   |   |          | Р   |                   |                      |                  |  |  |  |
|                           | Trans-rectal                 |   | ,   |          |     |                   |                      |                  |  |  |  |
|                           | Trans-vaginal                |   |   |          |     |                   |                      |                  |  |  |  |
|                           | Trans-urethral               |   |   |          |     |                   |                      |                  |  |  |  |
|                           | Trans-esoph. (non-Cardiac)   |   |   |          |     |                   |                      |                  |  |  |  |
|                           | Musculo-skel. (Convent.)     |   |   |          |     |                   |                      |                  |  |  |  |
|                           | Musculo-skel. (Superfic.)    |   |   |          |     |                   | -                    |                  |  |  |  |
|                           | Intra-luminal                | 1 |   | 1        |     |                   |                      |                  |  |  |  |
|                           | Other (spec.)                |   | -   |          |     |                   |                      |                  |  |  |  |
|                           | Cardiac Adult                |   |   |          | P   |                   | İ                    |                  |  |  |  |
| Cardiac                   | Cardiac Pediatric            |   |   |          | P   |                   |                      |                  |  |  |  |
|                           | Trans-esophageal (Cardiac)   |   |   |          |     |                   |                      |                  |  |  |  |
|                           | Other (spec.)                |   |   |          |     |                   |                      |                  |  |  |  |
| Peripheral                | Peripheral vessel            |   |   |          | P   |                   |                      |                  |  |  |  |
| Vessel                    | Other (spec.)                |   |   |          |     |                   |                      |                  |  |  |  |

N= new indication; P= previously cleared by FDA K103397; E= added under Appendix E

# Additional Comments:

Color Doppler includes Power (Amplitude) Doppler

Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD) Prescription Use (Per 21 CFR 801.109)

(Division Sign Of

Division of Radiological Devices Office of In Vitro Diagnostic Device Evaluation and Safety

Indications for Use

510(k) No.:

Device Name: CW4.0 for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

| ***                       |  | Mode of Operation (*includes simultaneous B-mode) |   |     |     |                   |                      |                  |  |  |
|---------------------------|--|---|---|-----|-----|-------------------|----------------------|------------------|--|--|
| General<br>(Track I only) | Clinical Application Specific (Tracks I & III) | В   | М | PWD | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.) |  |  |
| Ophthalmic                | Ophthalmic                                     |   |   |     |     |                   |                      |                  |  |  |
| _                         | Fetal (See Note 3)                             |   |   |     |     | -"                |                      |                  |  |  |
|                           | Abdominal                                      |   |   |     |     |                   |                      |                  |  |  |
|                           | Intra-operative (See Note 6)                   |   |   |     |     |                   |                      |                  |  |  |
|                           | Intra-operative (Neuro.)                       |   |   |     |     |                   |                      |                  |  |  |
| Fetal Imaging             | Laparoscopic                                   |   |   |     |     |                   |                      |                  |  |  |
| & Other                   | Pediatric                                      |   |   |     | Р   |                   |                      |                  |  |  |
|                           | Small Organ (See Note 5)                       |   |   |     |     |                   |                      |                  |  |  |
|                           | Neonatal Cephalic                              |   |   |     |     |                   |                      |                  |  |  |
|                           | Adult Cephalic                                 | -1  |   |     | P   |                   | · ·                  |                  |  |  |
|                           | Trans-rectal                                   |   |   |     |     |                   |                      |                  |  |  |
|                           | Trans-vaginal                                  |   |   |     |     |                   |                      |                  |  |  |
|                           | Trans-urethral                                 |   |   |     |     |                   | "                    |                  |  |  |
|                           | Trans-esoph. (non-Cardiac)                     |   |   |     |     |                   |                      |                  |  |  |
|                           | Musculo-skel. (Convent.)                       |   |   |     |     |                   | "                    |                  |  |  |
|                           | Musculo-skel. (Superfic.)                      |   |   |     |     |                   |                      |                  |  |  |
|                           | Intra-luminal                                  |   |   |     |     |                   |                      |                  |  |  |
|                           | Other (spec.)                                  |   |   |     |     |                   |                      |                  |  |  |
|                           | Cardiac Adult                                  |   |   |     | Р   |                   |                      |                  |  |  |
| Cardiac                   | Cardiac Pediatric                              |   |   |     | Р   | _                 |                      |                  |  |  |
|                           | Trans-esophageal (Cardiac)                     |   |   |     |     |                   |                      |                  |  |  |
|                           | Other (spec.)                                  |   |   |     |     |                   |                      |                  |  |  |
| Peripheral                | Peripheral vessel                              |   |   |     | Р   |                   |                      |                  |  |  |
| Vessel                    | Other (spec.)                                  |   |   | i   |     |                   |                      |                  |  |  |

N= new indication; P= previously cleared by FDA K103397; E= added under Appendix E

## **Additional Comments:**

Color Doppler includes Power (Amplitude) Doppler Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD

Note 2: Includes imaging for guidance of biopsy

Note 3: Includes infertility monitoring of follicle development

Note 4: Color M-mode

Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients

Note 6: Abdominal organs and peripheral vessel

Note 7: Tissue Harmonic Imaging (THI)

Note 8: 3D imaging

Note 9: Panoramic imaging

Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD) Prescription Use (Per 21 CFR 801.109)

Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

Indications for Use

510(k) No.:

Device Name: CW6.0 for use with ACCUVIX A30

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

|                           | Mode of Operation (*includes simultaneous B-mode) |   |   |     |     |                   |                      |                  |  |
|---------------------------|---|---|---|-----|-----|-------------------|----------------------|------------------|--|
| General<br>(Track I only) | Specific<br>(Tracks I & III)                      | В | М | PWD | CWD | Color<br>Doppler* | Combined*<br>(Spec.) | Other<br>(Spec.) |  |
| Ophthalmic                | Ophthalmic  |   |   |     |     |                   |                      |                  |  |
|                           | Fetal (See Note 3)                                |   |   |     |     |                   |                      |                  |  |
|                           | Abdominal   |   |   |     |     |                   |                      |                  |  |
|                           | Intra-operative (See Note 6)                      |   |   |     |     |                   |                      |                  |  |
|                           | Intra-operative (Neuro.)                          |   |   |     |     |                   |                      |                  |  |
| Fetal Imaging             | Laparoscopic                                      |   |   |     |     |                   | ,                    |                  |  |
| & Other                   | Pediatric   |   |   |     | N   |                   |                      |                  |  |
|                           | Small Organ (See Note 5)                          |   |   |     |     |                   |                      |                  |  |
|                           | Neonatal Cephalic                                 |   |   |     |     |                   |                      |                  |  |
|                           | Adult Cephalic                                    |   |   |     | N   |                   | - 1                  |                  |  |
|                           | Trans-rectal                                      |   |   |     |     |                   |                      |                  |  |
|                           | Trans-vaginal                                     |   |   | i   |     |                   |                      | ·                |  |
|                           | Trans-urethral                                    |   |   |     |     |                   |                      |                  |  |
|                           | Trans-esoph. (non-Cardiac)                        |   |   |     | -   |                   |                      |                  |  |
|                           | Musculo-skel. (Convent.)                          |   |   |     |     |                   |                      |                  |  |
|                           | Musculo-skel. (Superfic.)                         |   |   | i   | •   |                   |                      |                  |  |
|                           | Intra-luminal                                     |   |   |     |     |                   | 1                    |                  |  |
| •                         | Other (spec.)                                     |   |   |     |     |                   |                      |                  |  |
|                           | Cardiac Adult                                     |   |   |     | N   |                   |                      |                  |  |
| Cardiac                   | Cardiac Pediatric                                 |   |   |     | N   |                   |                      |                  |  |
|                           | Trans-esophageal (Cardiac)                        |   |   |     |     |                   |                      | •                |  |
|                           | Other (spec.)                                     |   |   |     |     |                   |                      |                  |  |
| Peripheral                | Peripheral vessel                                 |   |   |     | N   |                   |                      |                  |  |
| Vessel                    | Other (spec.)                                     |   | • |     |     |                   |                      |                  |  |

N= new indication; P= previously cleared by FDA; E= added under Appendix E

#### Additional Comments:

Color Doppler includes Power (Amplitude) Doppler

- Note 1: B+M, B+PW, B+C, B+PD, B+CW, B+C+PW, B+PD+PW, B+C+M, Dual B, Dual B+C, Dual B+PD
- Note 2: Includes imaging for guidance of biopsy
- Note 3: Includes infertility monitoring of follicle development
- Note 4: Color M-mode
- Note 5: For example: thyroid, parathyroid, breast, scrotum and penis in adult, pediatric and neonatal patients
- Note 6: Abdominal organs and peripheral vessel
- Note 7: Tissue Harmonic Imaging (THI)
- Note 8: 3D imaging
- Note 9: Panoramic imaging
- Note10: ElastoScan

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

Prescription Use (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Radiological Devices
Office of In Vitro Diagnostic Device Evaluation and Safety

510K 4112339

Indications for Use

Section 1.3, page 15